

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A monitor apparatus of a wireless network connected to an access point of the wireless network via a network, said access point retaining packet transfer information including information of a correspondence between a port of said access point and an interface of said port, and information of a correspondence between an address of a transfer destination and the port, said monitor apparatus comprising:

a managed terminal list having addresses of ~~terminals registered~~ pre-registered end-user devices, said ~~terminals~~ end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

a means configured to receive said packet transfer information from said access point, to detect a port bound to a wireless interface, said wireless interface being the port of the access point, from said packet transfer information, and to extract an address of a transfer destination corresponding to said detected port; and

an estimating means for estimating that a terminal corresponding to an address registered in said managed terminal list, said address coinciding with said extracted address, exists as a subordinate of the access point retaining said received packet transfer information.

2. (Currently Amended) A monitor apparatus of a wireless network connected to an access point of wireless network via a network, said monitor apparatus comprising:

a managed terminal list having addresses of ~~terminals registered~~ pre-registered end-user devices, said ~~terminals~~ end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

a means configured to receive said packet transfer information from said access point, to detect a port bound to a wireless interface, said wireless interface being the port of the access point, from said packet transfer information, and to extract an address of a transfer destination corresponding to said detected port; and

a determining means for investigating an operation situation of a terminal corresponding to an address registered in said managed list, said list address coinciding with said extracted address, to determine that said terminal having said extracted address has a connection with the access point retaining said received packet transfer information in a case where said terminal having said address is in operation.

3. (Previously Presented) The monitor apparatus of a wireless network according to claim 2, further comprising:

a determining means for comparing said extracted address with an address described in said managed terminal list, and for, in a case where said extracted address is not included in said managed terminal list, determining that an access to the access point retaining said packet transfer information has been made by a terminal that is not a target of management.

4. (Previously Presented) The monitor apparatus of a wireless network according to claim 2, further comprising:

a means for drawing a result on a relation between an access point and terminals, which are estimated to be existent as subordinates of said access point, or are determined to be in connection with said access point, for all the access points under management thereof to display a relation between each access point and each terminal that is estimated to be existent as a subordinate of each access point, or each terminal that is determined to be in connection with each access point.

5. (Currently Amended) The monitor apparatus of a wireless network according to claim 2, characterized in wherein, in a case where the address of the identical terminal has been described in said packet transfer information retained by plural access points, including:

a means for, from among said packet transfer information, selecting the packet transfer information retained by the access point belonging to an identical subnet to that of said terminal, or the access point corresponding to a virtual LAN; and

a means for, in a case where said selected packet transfer information retained by the access point belongs to the identical subnet to that of said terminal, and yet the number thereof is only one, estimating that said terminal exists as a subordinate of said one access

point, or determines that said terminal has a connection with its access point, for, in a case where said access point belongs to the identical subnet to that of said terminal, and yet the number thereof is plural, estimating that said terminal exists as a subordinate of one of said plurality of said access points, or determines that said terminal has a connection with its access point, and for, in a case where all said access points do not belong to the identical subnet to that of said terminal, and yet each thereof is an access point corresponding to a virtual LAN, estimating that said terminal exists as a subordinate of one of said access points corresponding to said virtual LAN, or determines that said terminal has a connection with to its access point.

6. (Currently Amended) The monitor apparatus of a wireless network according to claim 2, ~~characterized in~~ wherein, in a case where the address of the identical terminal has been described in said packet transfer information retained by plural access points, including:

- a means for, from said terminal, acquiring identification information of the wireless network to which said terminal belongs;

- a means for comparing identification information of said plural access points with the identification information acquired from said terminal; and

- a means for estimating that said terminal exists as a subordinate of the access point having the identification information identical to the identification information acquired from said terminal, or determining that said terminal has a connection with its access point.

7. (Currently Amended) A monitor system of a wireless network, said monitor system comprising:

- at least one access point of a wireless network, said at least one access point retaining packet transfer information including information of a correspondence between a port of said at least one access point and an interface of said port, and information of a correspondence between an address of a transfer destination and the port;

- at least one terminal of the wireless network; and

- a monitor apparatus connected to said at least one access point via a network, wherein said monitor apparatus comprises:

a managed terminal list having addresses of ~~terminals registered~~ pre-registered end-user devices, said ~~terminals~~ end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

a means configured to receive said packet transfer information from said at least one access point, to detect a port bound to a wireless interface, said wireless interface being the port of the at least one access point, from said packet transfer information, and to extract an address of a transfer destination corresponding to said detected port; and

an estimating means for estimating that a terminal corresponding to an address registered in said managed terminal list, said address coinciding with said extracted address, exists as a subordinate of the access point retaining said received packet transfer information.

8. (Currently Amended) A monitor system of a wireless network, said monitor system comprising:

at least one access point of the wireless network;

at least one terminal of the wireless network; and

a monitor apparatus connected to said access point via a network, wherein said monitor apparatus comprises:

a managed terminal list having addresses of ~~terminals registered~~ pre-registered end-user devices, said ~~terminals~~ end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

a means configured to receive said packet transfer information from said at least one access point, to detect a port bound to a wireless interface, said interface being the port of the at least one access point, from said packet transfer information, and to extract an address of a transfer destination corresponding to said detected port; and

a determining means for investigating an operation situation of a terminal corresponding to an address registered in said managed list, said list address coinciding with said extracted address, to determine that said terminal having said extracted address has a connection with the access point retaining said received packet transfer information in a case where said terminal having said address is in operation.

9. (Previously Presented) The monitor system of a wireless network according to claim 8, wherein said monitor apparatus further comprises:

a determining means for comparing said extracted address with an address described in said managed terminal list to determine that an access to the access point retaining said packet transfer information has been made by a terminal that is not a target of management in a case where said extracted address is not included in said managed terminal list.

10. (Previously Presented) The monitor system of a wireless network according to claim 8, wherein said monitor apparatus further comprises:

a means for drawing a result on a relation between an access point and terminals, which are estimated to be existent as subordinates thereof, or are determined to be in connection with said access point, for all access points under management thereof to display a relation between each access point and each terminal that is estimated to be existent as a subordinate of each access point, or each terminal that is determined to be in connection with each access point.

11. (Currently Amended) The monitor system of a wireless network according to claim 8, ~~characterized in that~~ wherein, in a case where the address of the identical terminal has been described in said packet transfer information retained by plural access points, said monitor apparatus includes:

a means for, from among said packet transfer information, selecting the packet transfer information retained by the access point belonging to an identical subnet to that of said terminal, or the access point corresponding to a virtual LAN; and

a means for, in a case where said selected packet transfer information retained by the access point belongs to the identical subnet to that of said terminal, and yet the number thereof is only one, estimating that said terminal exists as a subordinate of said one access point, or determining that said terminal has a connection with its access point, for, in a case where said access point belongs to the identical subnet to that of said terminal, and yet the number thereof is plural, estimating that said terminal exists as a subordinate of one of said plurality of said access points, or determining that said terminal has a connection with its access point, and for, in a case where all the access points do not belong to the identical subnet to that of said terminal, and yet each thereof is an access point corresponding to a virtual LAN, estimating that said terminal exists as a subordinate of one of said access points

corresponding to said virtual LAN, or determining that said terminal has a connection with its access point.

12. (Currently Amended) The monitor system of a wireless network according to claim 8, ~~characterized in that~~ wherein, in a case where the address of the identical terminal has been described in said packet transfer information retained by plural access points, said monitor apparatus includes:

a means for, from said terminal, acquiring identification information of the wireless network to which said terminal belongs;

a means for comparing identification information of said plural access points with the identification information acquired from said terminal; and

a means for estimating that said terminal exists as a subordinate of the access point having identification information identical to the identification information acquired from said terminal, or determining that said terminal has a connection with its access point.

13. (Previously Presented) The monitor system of a wireless network according to claim 8, wherein:

said terminal includes a means for transmitting a broadcast packet; and

said access point includes a means for updating the packet transfer information that the access point retains based upon said broadcast packet.

14. (Previously Presented) The monitor system of a wireless network according to claim 8, wherein said access point further comprises:

a means for notifying to the other access point information as to which access point to which the terminal belongs; and

a means for updating the packet transfer information that the access point retains based upon said information as to which access point to which said terminal belongs.

15. (Currently Amended) A control program embodied on a non-transitory memory that when executed causes a device to perform operations comprising:

storing a managed terminal list having addresses of ~~terminals registered~~ pre-registered end-user devices, said ~~terminals~~ end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

receiving packet transfer information from an access point;

detecting a port bound to a wireless interface from said packet transfer information, said wireless interface being the port of the access point,

extracting an address of a transfer destination corresponding to said detected port; and

estimating that a terminal corresponding to an address registered in a managed terminal list exists as a subordinate of the access point retaining said packet transfer information,

wherein said address coincides with said extracted address.

16. (Currently Amended) A control program embodied on a non-transitory memory that when executed causes a device to perform operations comprising:

storing a managed terminal list having addresses of ~~terminals registered~~ pre-registered end-user devices, said ~~terminals~~ end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

receiving packet transfer information from an access point;

detecting a port bound to a wireless interface from said packet transfer information, said wireless interface being the port of the access point;

extracting an address of a transfer destination corresponding to said detected port; and

investigating an operation situation of a terminal corresponding to an address registered in a managed list to determine that said terminal having said extracted address has a connection with the access point retaining said received packet transfer information in a case where said terminal having said address is in operation,

wherein said address coincides with said extracted address.

17. (Currently Amended) The control program according to claim 16, wherein the operations further comprise comparing said extracted address with an address described in ~~[[a]] said managed terminal list having an address of a terminal, which is a target of management, registered~~ to determine that an access to the access point retaining said packet

transfer information has been made by a terminal that is not a target of management in a case where said extracted address is not included in said managed terminal list.

18. (Previously Presented) The control program according to claim 16, wherein the operations further comprise drawing a result on a relation between an access point and terminals, which are estimated to be existent as subordinates of said access point, or are determined to be in connection with said access point, for all the access points under management thereof to display a relation between each access point and each terminal that is estimated to be existent as a subordinate of each access point, or each terminal that is determined to be in connection with each access point.

19. (Previously Presented) The control program according to claim 16, wherein the operations further comprise:

from among said packet transfer information, selecting the packet transfer information retained by the access point belonging to the identical subnet to that of said terminal, or the access point corresponding to a virtual LAN; and

in a case where said selected packet transfer information retained by the access point belongs to the identical subnet to that of said terminal, and yet the number thereof is only one, estimating that said terminal exists as a subordinate of said one access point, or determining that said terminal has a connection with its access point, for, in a case where said access point belongs to the identical subnet to that of said terminal, and yet the number thereof is plural, estimating that said terminal exists as a subordinate of one of said plurality of said access points, or determining that said terminal has a connection with its access point, and for, in a case where all the access points do not belong to the identical subnet to that of said terminal, and yet each thereof is an access point corresponding to a virtual LAN, estimating that said terminal exists as a subordinate of one of said access points corresponding to said virtual LAN, or determining that said terminal has a connection with its access point.

20. (Previously Presented) The control program according to claim 16, wherein the operations further comprise:

acquiring identification information of the wireless network to which the terminal belongs;

comparing identification information of said plural access points with the identification information acquired from said terminal; and

estimating that said terminal exists as a subordinate of the access point having the identification information identical to the identification information acquired from said terminal, or determining that said terminal has a connection with its access point.

21. (Currently Amended) A monitor method of a wireless network for managing a terminal, comprising:

storing a managed terminal list having addresses of ~~terminals~~registered pre-registered end-user devices, said ~~terminals~~end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

receiving packet transfer information from an access point;

detecting a port bound to a wireless interface from said packet transfer information, said wireless interface being the port of the access point;

extracting an address of a transfer destination corresponding to said detected port; and

estimating that a terminal corresponding to an address registered in said managed terminal list, said address coinciding with said extracted address, exists as a subordinate of the access point retaining said received packet transfer information.

22. (Currently Amended) A monitor method of a wireless network for managing a terminal, comprising:

storing a managed terminal list having addresses of ~~terminals~~registered pre-registered end-user devices, said ~~terminals~~end-user devices being targets of management, where the access point and the end-user devices are separate and independent devices;

receiving packet transfer information from an access point;

detecting a port bound to a wireless interface from said packet transfer information, said wireless interface being the port of the access point;

extracting an address of a transfer destination corresponding to said detect port; and

investigating an operation situation of a terminal corresponding to an address registered in said managed list, said list addresses coinciding with said extracted address, to determine if said terminal having said extracted address has a connection with the access

point retaining said received packet transfer information in a case where said terminal having said address is in operation.

23. (Currently Amended) The monitor method of a wireless network according to claim 22, further comprising:

comparing said extracted address with an address described in ~~[[a]] said managed terminal list having an address of a terminal, which is a target of management,~~ registered to determine that an access to the access point retaining said packet transfer information has been made by a terminal that is not a target of management in a case where said extracted address is not included in said managed terminal list.

24. (Previously Presented) The monitor method of a wireless network according to claim 22, further comprising:

drawing a result on a relation between an access point and terminals, which are estimated to be existent as subordinates of said access point, or are determined to be in connection with said access point, for all the access points under management thereof to display a relation between each access point and each terminal that is estimated to be existent as a subordinate of each access point, or each terminal that is determined to be in connection with each access point.

25. (Currently Amended) The monitor method of a wireless network according to claim 22, ~~characterized in wherein~~, in a case where the address of the identical terminal has been described in said packet transfer information retained by plural access points, including:

a step of, from among said packet transfer information, selecting the packet transfer information retained by the access point belonging to the identical subnet to that of said terminal, or the access point corresponding to a virtual LAN; and

a step of, in a case where said selected packet transfer information retained by the access point belongs to the identical subnet to that of said terminal, and yet the number thereof is only one, estimating that said terminal exists as a subordinate of said one access point, or determining that said terminal has a connection with its access point, of, in a case where said access point belongs to the identical subnet to that of said terminal, and yet the number thereof is plural, estimating that said terminal exists as a subordinate of one of said

plurality of said access points, or determining that said terminal has a connection with its access point, and of, in a case where all the access points do not belong to the identical subnet to that of said terminal, and yet each thereof is an access point corresponding to a virtual LAN, estimating that said terminal exists as a subordinate of one of the access points corresponding to said virtual LAN, or determining that said terminal has a connection with its access point.

26. (Currently Amended) The monitor method of a wireless network according to claim 22, ~~characterized in wherein~~, in a case where the address of the identical terminal has been described said packet transfer information retained by plural access point, including:

a step of, from said terminal, acquiring identification information of the wireless network to which said terminal belongs;

a step of comparing identification information of said plural access points with the identification information acquired from said terminal; and

a step of estimating that said terminal exists as a subordinate of the access point having the identification information identical to the identification information acquired from said terminal, or determining that said terminal has a connection with its access point.